



Creatinine PAP FS*

In-vitro-Diagnostic for veterinary use only

Diagnostic reagent for quantitative in vitro determination of creatinine in serum or plasma on DiaSys respons[®]910 VET

Order Information

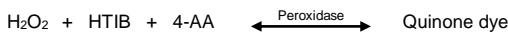
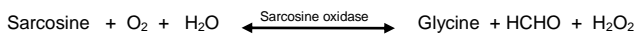
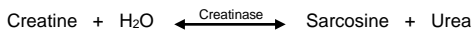
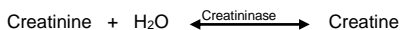
Cat. No. 1 1759 99 11 920
4 twin containers for 180 tests each

Method

Enzymatic colorimetric test

Principle

Creatinine is determined by the following reaction:



The absorbance of the produced red dye at 545 nm is proportional to the creatinine concentration in the sample.

Reagents

Components and Concentrations

R1:	Goods buffer	pH 8.1	25 mmol/L
	Creatinase		≥ 30 kU/L
	Sarcosine oxidase		≥ 10 kU/L
	Ascorbate oxidase		≥ 2.5 kU/L
	Catalase		≥ 350 kU/L
	HTIB (3-Hydroxy 2,4,6-triiodo benzoic acid)		2.3 mmol/L
R2:	Goods buffer	pH 8.1	25 mmol/L
	Creatininase		≥ 150 kU/L
	Peroxidase		≥ 50 kU/L
	4-Aminoantipyrine (4-AA)		2 mmol/L
	Potassium hexacyanoferrate		0.18 mmol/L

Storage Instructions and Reagent Stability

The reagents are stable up to the end of the indicated month of expiry, if stored at 35.6 – 46.4°F, protected from light and contamination is avoided. DiaSys respons containers provide protection from light. Do not freeze the reagents!

Warnings and Precautions

1. Reagent 2 contains sodium azide (0.95 g/L) as preservative. Do not swallow! Avoid contact with skin and mucous membranes.
2. In very rare cases, samples of animals with gammopathy might give falsified results.
3. N-acetylcysteine (NAC), acetaminophen and metamizole medication leads to falsely low results in animal samples.
4. Please refer to the safety data sheets and take the necessary precautions for the use of laboratory reagents. For diagnostic purposes, the results should always be assessed with the animal's medical history, clinical examinations and other findings.
5. For professional use only!

Waste Management

Please refer to local legal requirements.

Reagent Preparation

The reagents are ready to use. The bottles are placed directly into the reagent rotor.

Specimen

Serum and heparin plasma

Stability :

2 days at 39.2°F to 77°F

Discard contaminated specimens.

Calibrators and Controls

For calibration, the DiaSys TruCal U calibrator is recommended. The calibrator values have been made traceable to NIST (National Institute for Standardization) Standard Reference Material SRM 967 using level 1 and 2 and, therefore, to GC-IDMS (gas chromatography-isotope dilution mass spectrometry). For internal quality control DiaSys TruLab N and P should be assayed. Each laboratory should establish corrective action in case of deviations in control recovery.

	Cat. No.	Kit size
TruCal U	5 9100 99 11 063	20 x 3 mL
TruLab N	5 9000 99 11 062	20 x 5 mL
TruLab P	5 9050 99 11 062	20 x 5 mL

Performance Characteristics

The performance characteristics were evaluated with human samples and might differ from results obtained with various animal specimen.

Measuring range up to 160 mg/dL creatinine in serum (in case of higher concentrations re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function).	
Limit of detection**	0.1 mg/dL creatinine
On-board stability	3 weeks
Calibration stability	3 weeks

Interfering substance	Interferences < 10%	Creatinine [mg/dL]
Ascorbate	up to 30 mg/dL	1.16
Hemoglobin	up to 400 mg/dL	1.55
	up to 550 mg/dL	5.08
Bilirubin, conjugated	up to 30 mg/dL	1.81
	up to 35 mg/dL	16.2
Bilirubin, unconjugated	up to 20 mg/dL	1.75
	up to 30 mg/dL	16.2
Lipemia (triglycerides)	up to 1000 mg/dL	1.66
	up to 2000 mg/dL	15.4
Creatine	up to 40 mg/dL	1.52
	up to 60 mg/dL	15.0
Proline	up to 12 mg/dL	1.10

For further information on interfering substances refer to Young DS. Effects of Drugs on Clinical Laboratory Tests. 5th. ed. Volume 1 and 2. Washington, DC: The American Association for Clinical Chemistry Press, 2000.

** according to NCCLS document EP17-A, vol. 24, no. 34

Conversion factor

Creatinine [mg/dL] x 88.4 = Creatinine [µmol/L]

Reference Range

Serum/plasma

				Unit
DOG	CAT	HORSE	CATTLE	
0.4 – 1.8	1.1 – 2.3	0.9 – 1.7	0.7 – 1.4	mg/dL

Source:

Reference ranges have been validated by DiaSys USA according to National Reference Laboratory standards.

Each laboratory should check if the reference ranges are transferable to its own animal population and determine own reference ranges if necessary.

Manufacturer

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